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APPLICATION N	0.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,856		09/17/2003	Robert Choi	KRN 318C	5777
23581	7590	07/18/2006		EXAM	INER
		VELL, P.C.	CARTAGENA, MELVIN A		
	FIC BUILI AMHILL S		ART UNIT	PAPER NUMBER	
PORTLA	ND, OR 9	7204	3754		
				DATE MAILED, 07/19/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/666,856	CHOI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Melvin A. Cartagena	3754				
The MAILING DATE of this communication apperiod for Reply	pears on the cover sheet wi	ith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNION (136(a). In no event, however, may a rewill apply and will expire SIX (6) MON e, cause the application to become AB	CATION. reply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 27 h	<u> //arch 2006</u> .					
2a) This action is <b>FINAL</b> . 2b) ⊠ This	This action is FINAL. 2b)⊠ This action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under I	Ex parte Quayle, 1935 C.D	). 11, 453 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-10,13-22 and 34-46</u> is/are pending	in the application.					
4a) Of the above claim(s) is/are withdra	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-10,13-22 and 34-46</u> is/are rejected						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
9) The specification is objected to by the Examine	er.					
10) The drawing(s) filed on is/are: a) acc		by the Examiner.				
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correct	tion is required if the drawing	(s) is objected to. See 37 CFR 1.121(d).				
11) ☐ The oath or declaration is objected to by the Ex	xaminer. Note the attached	d Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. §	119(a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority document		malication No.				
<ul><li>2. Certified copies of the priority document</li><li>3. Copies of the certified copies of the priority</li></ul>		<del></del>				
application from the International Burea	<u>-</u>	received in this National Stage				
* See the attached detailed Office action for a list		received.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview S	Summary (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s	s)/Mail Date				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 10222004&7112005&4.	) 5) ☐ Notice of Ii 6) ☐ Other:	nformal Patent Application (PTO-152) 				

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### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 27, 2006 has been entered.

## Claim Rejections - 35 USC § 112

2. Claims 13-20, 34 and 40-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 34 and 46 recite the limitation "a bite-actuated mouthpiece" in line 2 and lines 2 and 3 respectively. Since claims 1 and 35 recite "a bite-actuated mouthpiece" or alternatively a gas mask, is not clear if the "bite-actuated mouthpiece" of claims 34 and 46 is a double inclusion of the "bite-actuated mouthpiece" claimed in claims 1 and 35.

## Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

<sup>(</sup>a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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4. Claims 1-10, 13, 21, 22 and 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,712,594 to Schneider in view of US 6,239,210 to Kim et al.

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Schneider shows a liquid storage and delivery system as seen in Figs. 1, 10, 11, 12 and 13 having a flexible fluid reservoir 82 adapted to receive a volume of drinking fluid, a fill port 83, exit ports 84, an elongated downstream assembly 65 in fluid communication with an exit port 71, a fitting 68 adapted to interconnect with a gas mask 10, connectors 64, 65 and 66, an elongated downstream assembly 19 in fluid communication with an exit port 11, a mouth piece, see column 2, lines 37-42. Schneider is silent about the flexible fluid reservoir made of a clear material containing ethylene vinyl alcohol layer with at least one waterproof layer on each side. Kim shows a clear reservoir made with a clear gas resistant layer containing ethylene vinyl alcohol layered with a waterproof heat-sealable polyester layer on each side. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to make the reservoir of Schneider using a multilaminate material as taught by Kim to give the ethylene vinyl alcohol containing layer additional structural strength, see column 1, lines 40-47.

With respect to the product by process limitation in claims 3 and 10, see MPEP 2113: "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

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With respect to the thickness and the resistance to the chemical exposure of the layers as claimed in claims 4-9 and 36-38, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to make the layers of a suitable thickness to provide adequate protection according to the level of chemical in the hazardous environment where the device is to be used and inherently a thicker layer would tend to resist longer exposure to the hazardous environment, in addition it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art, as per MPEP 2144.05.

5. Claims 14-20 and 41-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,712,594 to Schneider as modify by US 6,239,210 to Kim et al. as applied to claims 1 and 35 above, and further in view of US 5,374,088 to Moretti et al.

The Schneider-Kim combination shows all claimed features as discussed above except for the details of the quick connector having a resilient ring engaged with a female coupling. Moretti shows a quick-release connector as seen in Figs. 5, 8 and 9 having a male and female members 3 and 12 respectively, a resilient lock ring 2 inserted into cavity 11 of the female member that are spaced apart, the resilient ring locks the male member in place with supports 13, the female member also includes walls 21 that act as guards to prevent accidental release of the coupling, see column 4, lines 22-27. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to use the quick-connector of Moretti in the device of the Schneider-Kim combination to reduce the time it takes to engage the protective gear with the proper attachments in an emergency and reduce the risk of espousing the user to hazardous environments.

6. Claims 34 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,712,594 to Schneider as modify by US 6,239,210 to Kim et al. as applied to claims 1 and 35 above, and further in view of US 6,279,772 to Bowman.

The Schneider-Kim combination shows all claimed features as discussed above but is silent about the mouthpiece being resilient and self-sealing. Bowman shows a resilient bite valve as seen in Fig. 1. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to use the bite-actuated valve of Bowman in the device of the Schneider-Kim combination to create a liquid dispensing unit that maintain a fluid column in a delivery tube from a fluid reservoir to the fluid dispensing unit under negative and positive static state of pressure on the liquid dispensing unit as taught by Bowman.

## Response to Arguments

7. Applicant's arguments with respect to claims 1-13 and 21-33 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sausner shows a rapid-action coupling for hoses. Potash shows a canteen for use with a gas mask.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin A. Cartagena whose telephone number is (571) 272-4924. The examiner can normally be reached on T-F (7:30AM to 6:00 PM).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MHC 7/05/06

ERIC KEASEL
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